

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Complete Listing of Claims:

1. (Currently Amended) A coated substrate, comprising:
 - an antitarnish layer deposited on a substrate ~~in an amount effective to prevent tarnishing of said coated substrate~~ ; and
 - an outer layer deposited onto said antitarnish layer, said outer layer comprising tin or tin alloys having at least 50% by weight tin, and wherein said antitarnish layer is present in an amount effective to prevent tarnishing of said outer layer and said antitarnish layer comprises an antitarnish agent of zinc, wherein said antitarnish layer has a thickness of between 5 and 1000 Angstroms.
2. – 4. (Cancelled)
5. (Currently Amended) The coated substrate of claim [4] 1, wherein said antitarnish layer has a thickness of between 5 and 500 Angstroms.
6. (Original) The coated substrate of claim 1, wherein said outer layer has a thickness of between 10 and 1000 microinches.
7. (Original) The coated substrate of claim 6, wherein said outer layer has a thickness of between 10 to 400 microinches.

8. (Original) The coated substrate of claim 1, further comprising a barrier layer disposed between said substrate and said antitarnish layer.
9. (Currently Amended) The coated substrate of claim 8, wherein said barrier layer comprises an element selected from the group consisting of nickel, tin, iron, cobalt, copper, manganese, and combinations ~~and alloys~~ thereof.
10. (Original) The coated substrate of claim 1, wherein said outer layer further comprises a friction-reducing material selected from the group consisting of polyimide, polyamide, polytetrafluoroethylene, silicon carbide, aluminum oxide, tungsten carbide, molybdenum disulfide, and combinations thereof.
11. (Cancelled).
12. (Original) The coated substrate of claim 1, wherein said substrate comprises copper or a copper alloy.
13. (Currently Amended) A coated substrate comprising a coating on a substrate, said coating having a first surface and a second surface, said second surface positioned adjacent to said substrate, and comprising:
 - a metal layer comprising tin or tin alloys having at least 50% by weight tin; and
 - a nonzero concentration gradient of antitarnish agent diffused into said metal layer, said nonzero concentration gradient having the highest

concentration of said antitarnish agent at said second surface, said antitarnish agent present in said coating in an amount effective to prevent tarnishing of said ~~coating~~ metal layer, wherein said antitarnish agent is zinc;

and wherein said coating has a thickness between 10 microinches and 1000 microinches; and

wherein said coating further comprises a friction-reducing material that imparts said coating with a coefficient of friction in the range of from 0.1 to 0.3, said friction-reducing material selected from the group consisting of polyimide, polyamide, polytetrafluoroethylene, silicon carbide, aluminum oxide, tungsten carbide, molybdenum disulfide, and combinations thereof.

14. (Cancelled)
15. (Currently Amended) The coated substrate of claim 13, wherein said coating has a thickness of between 10 to 400 microinches.
16. (Currently Amended) The coated substrate of claim 13, wherein the amount of antitarnish agent in said coating ranges from 0.001 to 5 wt%, based on the total weight of said coating.
17. (Currently Amended) The coated substrate of claim 16, wherein the amount of antitarnish agent in said coating ranges from 0.005 to 3 wt%, based on the total weight of said coating.

18. (Currently Amended) The coated substrate of claim 17, wherein the amount of antitarnish agent in said coating ranges from 0.01 to 2 wt%, based on the total weight of said coating.
19. (Currently Amended) The coated substrate of claim 13, further comprising a barrier layer disposed between said second surface and said substrate ~~and said antitarnish layer~~.
20. (Currently Amended) The coated substrate of claim 19, wherein said barrier layer comprises an element selected from the group consisting of nickel, tin, iron, cobalt, copper, manganese, and combinations ~~and alloys~~ thereof.
- 21-22. (Cancelled).
23. (Currently Amended) The coated substrate of claim 13, wherein said substrate comprises copper or copper alloy.
- 24-41. (Cancelled).